

ABSTRACT

A method and an apparatus for providing a RAID 1 controller subsystem are provided. According to the invention, data or commands issued by a host system and addressed to a transport master are provided to a system bus interface. The system bus interface simultaneously provides the data or commands to the transport master and to a transport slave. The data or commands are then passed to the first and second devices substantially simultaneously. In a normal RAID 1 mode of operation, data retrieved from the first device is passed to the host system by the transport master. In a failover RAID 1 mode of operation, the data retrieved from the first device is not provided to the transport master. Instead, a multiplexer is operated to provide the transport master with the data retrieved from the second device. The invention also allows the controller to operate in a non-RAID 1 mode. The non-RAID 1 operating mode is enabled by operating the transport slave such that it does not act with respect to commands and data that are addressed to the transport master. According to the non-RAID 1 mode of operation, data for storage on the second device must be addressed to the transport slave.